# Review of Water Supply Reliability Estimation Related to the Sacramento-San Joaquin Delta

#### **Draft Outline**

## February 1, 2021

If you need assistance interpreting the content of this document, please e-mail disb@deltacouncil.ca.gov.

## Background

The Delta Independent Science Board (Delta ISB) is undertaking a review of the scientific efforts and methods by various programs to estimate and evaluate water supply reliability. Below is the current outline of the report, which will be discussed at the Delta ISB's February 11, 2021 meeting.

For more information on the scope of the review, please refer to the <u>Delta ISB's</u> water supply reliability review prospectus.

### Outline

- 1. Summary
  - a. Findings
  - b. Recommendations
  - c. Concluding Thoughts
- 2. Introduction
  - a. Water Supply in California
  - b. Overview of Water Supply Reliability Estimation
- 3. Water Supply Unreliability and Analysis in California
  - a. Causes of Water Supply Unreliability
  - b. A Selective Inventory of Reliability Estimation Efforts
- 4. Metrics of Water Supply Reliability and Their Use
  - a. Common Metrics of Water Supply Reliability
  - b. Metrics for Environmental Water Supply Reliability
- 5. Scientific Trends in Water Supply Reliability
  - a. Portfolios for Water Management
  - b. Water Quality
  - c. Climate Change
  - d. Uncertainty Analysis and Preparation
  - e. Multiple Objectives and Conflicts in Water Management

- 6. Quality Control in Reliability Estimation
  - a. Common Reasons that Water Supply Reliability Estimates Differ
  - b. Common Basis for Water Supply Reliability Estimates
- 7. Developing and Communicating Insights for Managers and Policymakers
  - a. Organizing the problem and solutions
  - b. Short-term Operation Decisions
  - c. Long-term Planning and Policy Decisions
  - d. Long-term Education and Insights for Policymakers
  - e. Potential for Decision Analysis
- 8. Priorities for Future Studies
- 9. Appendices
  - a. Appendix A. Some technical issues in estimating water supply reliability
  - b. Appendix B. Some notable successes
  - c. Appendix C. Questionnaire and Interview Insights
- 10. References